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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,503	12/17/2001	Jeffrey K. Reinemann	10559-540001/P12560	4314
20985 7590 06/21/2007 FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER CHAMPAGNE, LUNA	
			ART UNIT 3627	PAPER NUMBER
			MAIL DATE 06/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/024,503	Applicant(s) REINEMANN, JEFFREY K.	
	Examiner Luna Champagne	Art Unit 3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/27/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed on 03/27/2007 is acknowledged. Claims 1-9 are presented for examination. Claims 20-36 are cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 insofar as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blumenau et al. (6,195,703 B1), in view of Pian et al (5,357,632).

Blumenau et al. disclose a method of managing resources among networked processors 22,23,21,20 that include a host processor 22,23 and a remote processor 21. Blumenau et al. disclose a host activity monitoring facility 62 which reads on collecting accounting information at each of the networked processors to monitor utilization of the resources; releasing a local resource (local resource is read as the switch flow through the host ports) controlled by the host processor to the remote processor (remote processor is read as the switch control 55 which controls the switch functions of the hosts 22'-25'), col. 7 lines 61,62 disclose monitoring frequencies of the host to balance usage, the frequencies being a fixed range is read as a predetermined upper threshold

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and thus reads on "the utilization of the local resource maintained within a pre-determined upper threshold configured by an authorized user¹"; and col. 7 line 59 discloses a dynamic balancing facility which computes a new list of host controls on the switches based upon, inter alia, frequency threshold, which reduces the availability of the local resource to the remote processor by the host processor. However, Blumenau et al. do not appear to use an accounting manager which monitors the resources at the networked processor and releases resources based on collected accounting data nor do they disclose determining an upper limit of resource consumption for a remote processor. Pian et al. disclose a centralized accounting manager 122 which collects queue times from localized resources to collect accounting information (col. 8 lines 52 et seq.) at a networked processors 114 and further discloses determining an upper threshold for the local resource 146 e.g., an "upper limit is placed on the local ready task entry queue 146" and has a determined upper limit of resource consumption for the remote processor, see col. 9 lines 30-45 overflow occurs when nodes 124 have more tasks than they can hold. Further, Pian et al. disclose releasing ready task entries to remote processors 112 when the processors 112 are not in a more than they can hold

¹Blumenau et al. discloses in full: The digital computer 60 is also programmed with a dynamic balancing facility 63 that periodically computes a new list of storage subsystem ports for each of the hosts to access, based on the frequencies measured by the host activity monitoring facility 62 and a specified priority level assigned to each of the hosts. The priority level, for example, is specified by a system administrator 65. The dynamic balancing facility 63 maintains in the digital computer 60 a copy of each list 61 of storage subsystem ports for each host to access. Therefore, the digital computer 60 need not read any corresponding list 57 in the switch control computer in order to determine the routing characteristics of the switch 50 for any host. The dynamic balancing facility 63, for example, accesses the list 61 in order to compute the loading on each of the storage subsystem ports from the measured frequencies of data packets received or transmitted from each host.

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mode. It would be obvious to modify the method of Blumenau et al. to include a centralized manager such as device 122 in Pian et al. and to determine an upper limit consumption for a remote processor in Blumenau et al. as a function of releasing the local resource as taught by Pian et al., the motivation being the increased ability to forecast downstream availability of a resource.

Re claims 2,8: see, Blumenau col. 7 lines 63 et seq. a specified priority level is assigned to each of the hosts thereby answering the limitation of negotiating because prioritization inherently requires negotiations; the loop ports of the hosts 24,25 are read as an amount of the local resource and the switch 40 is read as an amount of a remote resource; and since the activity e.g. releasing into service of the switch is proportional to that of the loop ports, there is read an exchange therebetween.

Re claim 3, 5: Since the utilization of one host loop port in Blumenau will be exclusive of another's, this occurrence is read as substantially different in time.

Re claim 4, 6: the another resource is read as the balancing facility 63 of the computer in Blumenau which is read as the centralized location.

Re claim 9: the user defined condition is read as the access of hosts to storage in Blumenau.

Re claim 7: col. lines 13 et seq. discuss trying a port to determine if it is busy and if so then rerouting data until the first port is freed which is read as form of credit which is redeemed once the port frees up in Blumenau.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reply to Arguments:

Applicant's amendments fail to overcome the outstanding rejections for the following reasons:

Applicant argues that in Blumenau et al., resource management is not conducted between a host processor and a remote processor included among networked processors. However, in Blumenau et al., the loop ports of the hosts 24,25 are read as an amount of the local resource and the switch 40 is read as an amount of a remote resource.

Applicant also argues that Blumenau does not describe or suggest "collecting accounting information from an accounting manager at each of the networked processors, wherein each accounting manager monitors utilization of resources at the networked processor. Pian et al. disclose a centralized accounting manager 122 which collects queue times from localized resources to collect accounting information (col. 8 lines 52 et seq.) at a networked processors 114.

Furthermore, Applicant argues that Pian et al. do not describe or suggest a supervisory control processor for each distributed control processor (*hence one supervisory control processor to many distributed control processors*). In claim 1, Applicant states that each accounting manager monitors utilization of resources at the networked processor (*hence multiple accounting managers to one networked processor*); which is different from Applicant's argument concerning Pian. The argument is not consistent with Applicant's claim.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luna Champagne whose telephone number is (571) 272-7177. The examiner can normally be reached on Monday - Friday, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on (571) 272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Luna Champagne
Examiner
Art Unit 3627

June 11, 2007

Andrew Joseph Rudy
Primary Examiner, AU 3627